

DATASHEET

FUJITSU ESPRIMO E9900 0-WATT DESKTOP PC

THE INNOVATIVE 0-WATT PC

ESPRIMO E9900 0-WATT

As a 0-Watt PC, the ESPRIMO E9900, equipped with innovative technology from Fujitsu and Intel®, is a power-saving miracle meeting all business and space requirements. With a volume of less than 13 litres it can be positioned vertically or horizontally - ideal for every desk. Made of specially selected material and, in addition to the 0-Watt function, equipped with further power-save options, such as a switched monitor outlet and power management, the ESPRIMO small form factor PC already meets today the legal requirements of tomorrow. Furthermore, this desktop PC, equipped with a power supply with up to 89% efficiency, meets ENERGY STAR® 5.0 certification requirements. Don't make any compromises!



0-WATT PC

Cost savings by completely reducing off-mode losses

- Patented function for 0-Watt power consumption in off and hibernating mode with simultaneous management in a time slot that can be optionally set

ENVIRONMENTALLY CONSCIOUS PRODUCT WITH ENERGY STAR 5.0 CERTIFICATION

Your contribution to environmental protection for the continued existence of our planet

- Halogen-free mainboard, sophisticated product concept for the entire lifecycle



HIGHEST ENERGY EFFICIENCY COUPLED WITH INTELLIGENT PERFORMANCE

The best-in-class regarding power consumption combined with new levels of performance

- State-of-the-art Intel® Core™ processors with Turbo Boost and hyperthreading technology and a power supply with up to 89% efficiency

SYSTEM MANAGEMENT

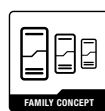
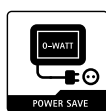
Easy system administration for complex IT infrastructure

- Intel® vPro™ technology

SILENT OPERATION

Pleasant working environment due to an extremely quiet system

- Innovative hardware design, optimized fan concept



COMPONENTS

PROCESSOR	Intel® Core™ i7 processor i7-860 (4C/8T, 2.80 GHz, 8 MB)
	Intel® Core™ i5 processor i5-750 (4C/4T, 2.66 GHz, 8 MB)
	Intel® Core™ i5 processor i5-670 (2C/4T, 3.46 GHz, 4 MB, Intel® HD Graphics)
	Intel® Core™ i5 processor i5-660 (2C/4T, 3.33 GHz, 4 MB, Intel® HD Graphics)
	Intel® Core™ i5 processor i5-650 (2C/4T, 3.20 GHz, 4 MB, Intel® HD Graphics)
	Intel® Core™ i3 processor i3-530 (2C/4T, 2.93 GHz, 4 MB, Intel® HD Graphics)
	Intel® Pentium® processor G6950 (2C/2T, 2.80 GHz, 3 MB, Intel® HD Graphics)
MEMORY MODULES	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1333 MHz, PC3-10600, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1333 MHz, PC3-10600, DIMM
HARD DISK DRIVES (INTERNAL)	SSD SATA, 128 GB, 2.5-inch
	SATA II, 7200 rpm, 1000 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T. business critical
	SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 320 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 250 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 160 GB, 2.5-inch, S.M.A.R.T.
Hard disk notes	Supporting NCQ and 3 GBit
GRAPHICS ADD ON CARDS (OPTIONAL)	DP to DVI-D Adapter Cable
	NVIDIA® GeForce® 9300GE display port low profile, 512 MB
	NVIDIA® GeForce® 9300GE low profile, 256 MB
	NVIDIA® GeForce® 9500GS low profile, 512 MB
	NVIDIA® Quadro NVS 290 low profile, 256 MB
MODULAR BAY OPTIONS	Blu-ray Disc Triple Writer, SATA I
	DVD-ROM, SATA I
	DVD Super Multi, SATA I
	MultiCard Reader 20in1, 3,5-Inch, USB 2.0
INTERFACE ADD ON CARDS/COMPONENTS (OPTIONAL)	
	WLAN III, 802.11g/Draft-n (Windows only)
	Parallel Interface
	Modem adapter kit (EU)
	Modem 56k incl. RJ11 modem cable
	Gigabit Ethernet PCIe x1
	FireWire PCI-Card IEEE1394
	eSATA Interface
	Dual serial card PCI LP
Base unit	ESPRIMO E9900 0-Watt
MAINBOARD	
Mainboard type	D2924
Formfactor	proprietary
Chipset	Intel® Q57
Processor socket	LGA 1156
Processor quantity maximum	1
Memory slots	4 DIMM (DDR3)
Supported capacity RAM (max.)	16 GB
Memory frequency	1333 MHz
Memory notes	Dual channel support.
	For dual channel performance, identical memory modules in each channel are necessary (minimum 2 modules).

MAINBOARD

LAN	10/100/1000 MBit/s Intel® 82578 DM
BIOS version	Phoenix 6.0
BIOS features	BIOS Flash EPROM update by software Recovery BIOS
Audio codec	Realtek ALC663
Audio features	Internal speaker supports audio playback, High Definition audio

I/O CONTROLLER ON BOARD

Serial ATA total	4
thereof eSATA	2 (optional)
Controller functions	Serial ATA II NCQ and 3 GBit AHCI Raid 1/0

INTERFACES

Audio: line-in	1
Audio: line-out	1
Front audio: microphone	1
Front audio: headphone	1
USB 2.0 total	12
USB front	2
USB rear	6
USB internal	4
VGA	via DVI to VGA adaptor (included for onboard graphics only)
DisplayPort	1 (for onboard graphics only)
DVI	1 (for onboard graphics only)
Serial (RS-232)	1 (9pin, 16 byte FIFO, 16550 compatible)
Mouse / Keyboard (PS/2)	2
Ethernet (RJ-45)	1
Parallel	optional (25pin with EPP and ECP)
Interface Module notes	Anytime USB charge functionality

INPUT DEVICE / COMPONENTS

Optical USB tilt wheel mouse
Optional: Optical USB/PS2 tilt wheel mouse

DRIVE BAYS

Drive bays total	3
3.5-inch internal bays	1
3.5-inch external bays	1
5.25-inch external bays	1
Drive bay notes	optional external bay as internal 3,5"

SLOTS

PCI-Express 2.0 x16	1 x (210 mm) low profile
PCI-Express 2.0 x4 (mech. x16)	1 x (210) low profile
PCI (32-bit / 33 MHz)	2 x (190 mm) low profile
Slots optional configuration	or 1x PCI Express x16 low profile (190mm) and via Riser 2 x PCI full height (174 / 210 mm)

GRAPHICS ON BOARD

Shared video memory	up to 1759 MB
Refresh rate 1024 x 768 (recommended / max.)	85 Hz / -
Refresh rate 1280 x 1024 (recommended / max.)	85 Hz / -
Refresh rate 1600 x 1200 (recommended / max.)	85 Hz / -

GRAPHICS ON BOARD

TFT resolution (VGA)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
TFT resolution (DVI)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
TFT resolution (Display Port)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel 2560 x 1440 pixel 2560 x 1600 pixel
Graphics features	DirectX 10 HDCP support OpenGL® 2.1
Graphics notes	Graphics controller integrated in dual-core processors. For quad-core processors graphics card is mandatory. Tested resolutions, depending on display type additional resolutions and frequencies possible Shared memory depending on main memory size and operating system Resolution (color depth up to 32 Bit/pixel) For TFT we recommend using 60Hz

ELECTRICAL VALUES

Power efficiency note	power supply efficiency (at 230V; 20% / 50% / 100% load) : 86% / 89% / 87% 0-Watt mode automatically
Rated voltage range	100 - 240 V
Rated frequency range	50 - 60 Hz
Operating voltage range	90 - 264 V
Operating line frequency range	47 - 63 Hz
Max. output of single power supply	250 W
Power factor correction/active power	active
Monitor outlet	Switched

POWER CONSUMPTION

Power consumption note	See white paper Energy Consumption 0-Watt mode automatically
Link to Energy White Paper	http://docs.ts.fujitsu.com/dl.aspx?id=73db6c1e-bf45-47be-9563-8f7633c0767f

HEAT DISSIPATION

Heat dissipation notes	See white paper Energy Consumption
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NOISE FOR STANDARD CONFIGURATION (HDD, ODD, FDD)

Noise emission	According to ISO9296
Related Processors for noise	Intel® Core™ i5-670 ; Intel® Core™ i7-860 including NVIDIA® Geforce® 9500GS
Noise Operation mode 1: ODD load (Blue angel requirement)	4.7 B / 32 dB(A) ; 4.5 B / 30 dB(A)
Noise Operation mode 2: HDD load (Blue angel requirement)	3.6 B / 20 dB(A) ; 3.4 B / 18 dB(A)
Noise Operation mode 3: CPU 90% load (Blue angel requirement)	3.5 B / 19 dB(A) ; 4.1 B / 27 dB(A)
Noise Operation mode 4: High load	3.6 B / 20 dB(A) ; 4.1 B / 26 dB(A)
Noise Operation mode 5: Office applications	3.6 B / 20 dB(A) ; 3.7 B / 21 dB(A)
Idle mode (Blue Angel requirement)	3.5 B / 19 dB(A) ; 3.4 B / 17 dB(A)

NOISE FOR STANDARD CONFIGURATION (HDD, ODD, FDD)

Noise notes / description	A weighted sound power level L _{wad} (in B) / workplace related A-weighted sound pressure level L _{pAm} (in dB(A)), Bystander position
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DIMENSIONS / WEIGHT / ENVIRONMENTAL

Dimensions (W x D x H)	340 x 380 x 100 mm
Operating position	Vertical / horizontal (no feet needed)
Weight	approx. 10 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35°C

COMPLIANCE

Product	ESPRIMO E9900
Model	DT7-2924
Germany	Blauer Engel / Blue Angel in progress GS optional
Europe	CE Nordic Swan in progress
USA/Canada	FCC Class B cCSAus
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 5.0 in progress EPEAT® in progress
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

OPERATING SYSTEM

Operating system optional preinstalled	Microsoft® Windows® 7 Home Premium Microsoft® Windows® 7 Professional TwinLoad Microsoft® Windows® XP Professional (DVD)
Operating system compatible	Linux Microsoft® Windows® XP Professional x64 Edition Microsoft® Windows® Vista®
Operating system notes	All Windows® 7 versions are Office 2007 ready.

ADDITIONAL SOFTWARE

Additional software (preinstalled)	Nero Essentials S (burning software)
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink Power2Go BD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive)

MISCELLANEOUS

	Thermal management
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COMPATIBILITY (REFERENCES)

	DMI 2.0 PC 2001 WMI 1.5 USB 2.0
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MANAGEABILITY

Manageability features	ASF 2.0 (Alert Standard Format) DeskUpdate Driver management DeskView Migrate (optional) DeskView Control (optional) PXE 2.1 Boot code BootP Boot Code including Bootmanage Administrator Software (tested) Wake up from S5 (off mode) Intrusion switch (optional) iAMT 6.0
Manageability type	DeskView 10.x client management including:

MANAGEABILITY

DeskView features	On/Offline remote client management Detailed system inventory management and reports BIOS Management Remote power management System notifications Advanced alerts (ASF implementation) Security Remote Control DeskView Helpdesk Integration WoL (Wake on LAN)
Manageability link	http://ts.fujitsu.com/manageability http://www.altiris.com/fujitsu

SECURITY

Physical security	Kensington Lock support Eye for padlock Optional: Integrated cabinet lock
System security	Boot sector virus protection Write protect option for the Flash EPROM Embedded security (TPM 1.2) Control of all USB interfaces External USB ports can be disabled separately Control of external interfaces
User security	User and supervisor BIOS password SystemLock 2 BIOS SmartCard Security Hard disk password Optional: Access protection via external SmartCard reader Optional: Access protection via internal SmartCard reader

SERVICEABILITY

FlexySlot
EasyFix
EasyChange for HDD
EasyChange for optical drives

PACKAGING INFORMATION

Packaging dimension	500x290x540 mm
Max. quantity / pallet	24
Material - Weight (g) Carton	1270 g
Material - Weight (g) EPS / PS	230 g
Material - Weight (g) PE	appr. 60 g
Packaging notes	printed user documentation is bleached in chlorine free process

WARRANTY**MAINTENANCE AND SUPPORT SERVICES - THE PERFECT EXTENSION**

Recommended Service	5x9, Response Time: Next Business Day
Spare Parts availability	5 years
Service Weblink	http://ts.fujitsu.com/Supportservice

FUJITSU PLATFORM SOLUTIONS

In addition to Fujitsu ESPRIMO E9900 0-Watt, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

MORE INFORMATION

Learn more about Fujitsu ESPRIMO E9900 0-Watt, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
<http://ts.fujitsu.com/ESPRIMO>

FUJITSU GREEN POLICY INNOVATION

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at <http://www.fujitsu.com/global/about/environment/>



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2010-03-04 CE-EN